



AMENDMENTS

Please amend the above identified application as follows:

*In The Claims*

Please cancel claims 1-35, 37, 40, 43, 45, 49, 51 and 52 without prejudice or disclaimer.

Please amend claims 36, 38, 39, 41, 42, 44, 46, 47, 48 as follows:

- 1 36. (Amended) A printed circuit board comprising:
  - 2 a printed wiring board;
  - 3 a plurality of components mounted on said printed wiring board; and
  - 4 an electrically continuous conformal coating for providing an EMI-impervious
  - 5 shield conformingly coating the printed circuit board, including,
    - 6 a conductive coating that prevents the electromagnetic waves from passing
    - 7 therethrough, said conductive coating conformingly adhered to the surface of one
    - 8 or more regions of the printed circuit board, wherein said conductive coating of
    - 9 each said region is electrically connected to each other, and
    - 10 a dielectric coating interposed between said conductive coating and
    - 11 predetermined portions of each said printed circuit board region, wherein said
    - 12 dielectric coating completely insulates said predetermined portions of said printed
    - 13 circuit board region.
- 1 38. (Amended) The printed circuit board of claim 36, wherein said one or more regions of
- 2 said conformal coating are physically contiguous.
- 1 39. (Amended) The printed circuit board of claim 36, wherein said printed circuit board
- 2 comprises:
  - 3 a plurality of ground pads mounted in said printed wiring board, wherein said
  - 4 conductive coating is connected electrically to said ground pads;
  - 5 a ground plane disposed in said printed wiring board; and
  - 6 a ground via connected to said ground pads and said ground plane.

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1       41. (Amended) The printed circuit board of claim 39, wherein said printed circuit board  
2       further comprises:

3               a shielded connector mounted on said printed wiring board, said shielded  
4       connector connected to a shielded cable through which signals travel,  
5               wherein said ground pads comprise a ground moat mounted on printed wiring  
6       board substantially around said shielded connector and connected electrically to a shield  
7       of said connector and to said ground plane.

1       42. (Amended) The printed circuit board of claim 36, wherein said regions of said  
2       conformal coating comprise:

3               a first region coating at least a portion of a top surface of said printed circuit  
4       board; and  
5               a second region covering at least a portion of a bottom surface of said printed  
6       circuit board.

1       44. (Amended) The printed circuit board of claim 42, wherein said printed circuit board  
2       has edge plating connected electrically to said first and second regions of said conformal  
3       coating, wherein said edge plating is electrically connected to a ground plane of said  
4       printed wiring board.

1       46. (Amended) The printed circuit board of claim 42, wherein said electrical connection  
2       between said first and second regions is provided by a combination of:

3               a first ground strip mounted on said top surface of said printed wiring board;  
4               a second ground strip mounted on said bottom surface of said printed wiring  
5       board; and  
6               a plurality of ground vias disposed in said printed wiring board to connect said  
7       first and second ground strips spaced around said printed wiring board so as to contact  
8       said first and second ground strips.

1       47. (Amended) The printed circuit board of claim 42, wherein said electrical connection  
2       between said first and second regions is provided by a plurality of electrically conductive

3 spring clips spaced around said printed wiring board to be electrically coupled with said  
4 conductive coating of said first region and said conductive coating of said second region.

1 48. (Amended) The printed circuit board of claim 36, wherein said printed wiring board  
2 comprises signal traces formed on the surface thereof, wherein said dielectric coating and  
3 said signal traces are constructed and arranged such that said surface signal traces have a  
4 desired characteristic impedance.

1 50. (Amended) The printed circuit board of claim 36, wherein one or more components  
2 are coated individually with said conformal EMI shield, wherein said conformal EMI  
3 shield which coats the one or more components is electrically connected to said  
4 conformal coating on said printed circuit board.

Please add the following new claims 53-70:

1 53. (New) The printed circuit board of claim 36, wherein said dielectric coating is  
2 comprised of a dielectric material that is thermally conductive.

1 54. (New) The printed circuit board of claim 36, wherein said dielectric coating has a  
2 combination of adhesion and viscosity that enables said dielectric coating to be applied  
3 with atomization spray techniques so as to access and adhere to exposed surfaces of said  
4 one or more regions of the printed circuit board.

1 55. (New) The printed circuit board of claim 54, wherein said dielectric coating is  
2 comprised of a plurality of successively-applied layers of dielectric material.

1 56. (New) The printed circuit board of claim 36, wherein said dielectric coating is  
2 thixotropic.

1 57. (New) The printed circuit board of claim 36, wherein said dielectric coating has a  
2 viscosity of at least 45" #2 Zahn Cup (full body).

1    58. (New) The printed circuit board of claim 36, wherein said dielectric coating has a  
2    viscosity of 50-100" #2 Zahn Cup (full body).

1    59. (New) The printed circuit board of claim 36, wherein said dielectric coating has a  
2    viscosity of 70-95" #2 Zahn Cup (full body).

1    60. (New) The printed circuit board of claim 36, wherein said dielectric coating has an  
2    adhesion that enables it to pass the ASTM D-3359-83 Method A Tape Test using a 1" (25  
3    mm wide) semi-transparent pressure-sensitive tape with an adhesion strength of 25-70  
4    ounces per inch.

1    61. (New) The printed circuit board of claim 60, wherein said dielectric coating has an  
2    adhesion that enables it to pass the ASTM D-3359-83 Method A Tape Test using a 1" (25  
3    mm wide) semi-transparent pressure-sensitive tape with an adhesion strength of 25-70  
4    ounces per inch when tested in accordance with ASTM Test Method D-3330.

1    62. (New) The printed circuit board of claim 60, wherein said dielectric coating has an  
2    adhesion that enables it to pass the ASTM D-3359-83 Method A Tape Test using a 1" (25  
3    mm wide) semi-transparent pressure-sensitive tape with an adhesion strength of 30-50  
4    ounces per inch when tested in accordance with ASTM Test Method D-3330.

1    63. (New) The printed circuit board of claim 36, wherein said dielectric coating is formed  
2    from multiple applications each forming a layer of dielectric coating approximately 1 mil  
3    thick.

1    64. (New) The printed circuit board of claim 36, wherein said conductive coating has a  
2    viscosity of 10-40" Zahn cup #3.

1    65. (New) The printed circuit board of claim 64, wherein said conductive coating has a  
2    viscosity of 15-30" Zahn cup #3.

1    66. (New) The printed circuit board of claim 36, wherein said conductive coating has an  
2    adhesion that satisfies ASTM 5B rating.